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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,200	04/11/2001	Chul-Min Kim	P56349	1160

7590 08/25/2005

Robert E. Bushnell
Suite 300
1522 K Street, N.W.
Washington, DC 20005

EXAMINER

SHIBRU, HELEN

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/832,200	Applicant(s) KIM, CHUL-MIN	
	Examiner SHIBRU HELEN	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-17 and 20 is/are rejected.
- 7) ☒ Claim(s) 8-9 and 18-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not disclose an amplifier which is connected to an output terminal of the peak detector (241b) as claimed in claims 7 and 17. Therefore the examiner considered the output terminal of the amplifier (241a) is connected to the input terminal of peak detector (241b) and rejected claims 7 and 17 accordingly.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-7, 10-12, 14-17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong (US Pat. No. 5,218,489).

Regarding claim 1, Jeong discloses a video signal processing unit having an envelope detector (see fig. 3 envelope detector (200)) for detecting an envelope of a frequency modulated (FM) video signal (see col. 2 lines 26-33), wherein a level variation switching circuit (see fig. 3 comparator (300) and second amplifier (450)) for changing an envelope level of the FM video signal according to an execution mode

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(the video signal detected by the reproducing head HD and that supplies to the comparator (300)) is incorporated into the video signal processing (col. 3 lines 41-51), and an ON/OFF switching control of the level variation switching circuit is executed in response to a control data input from a microprocessor (see fig. 2 SW1, auto and manual tracking modes, microcomputer (400) and col. 2 line 58-col.3 line 6, the VR is turning ON/OFF based on the microcomputer).

Claim 1 differs from Jeong in that the claim further requires a video signal processing integrated circuit (IC) having the envelope detector. Official notice is given that it is well known in the art to integrate circuit. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jeong by using integrated circuit in order to reduce system complexity, cost and transmitter performance.

Regarding claim 2, although Jeong does not specify that the level variation switching circuit reduces variation in the envelope level of the FM video signal according to standard playback (SP) mode information and super long playback (SLP) mode information, respectively, contained in the control data input from the microcomputer, Jeong discloses the switch SW1 selects automatic or manual tracking control (see col. 2 lines 58-62). Jeong further discloses the apparatus is effective tracking control for speed varying reproduction such as slow-motion reproduction (see col. 1 lines 13-17 and col. 1 lines 26-32). Jeong further teaches PAL type width (see col. 3 lines 17-21). Jeong further discloses the changes of the signal which supplied to the microcomputer (see col. 3 lines 41-50). Official notice is given that it is well known in the art that the

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envelope level of the FM video signal differs according to the playback mode. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jeong by reducing variation in the envelope level according to the SP/SLP mode of operation in order to execute auto tracking accurately.

Regarding claim 4, Jeong discloses the level variation switching circuit has a resistor at an output terminal of the envelope detector (see fig. 2 VR and Col. 2 line 66-col. 3 line 6, this resistor is turning on and off based on the input signal from the microprocessor).

Regarding claim 5, Jeong discloses a video signal processing circuit incorporating an envelope detecting circuit (see fig. 3 envelope detector (200)) for detecting an envelope level of an FM video signal (see col. 2 lines 26-33), wherein the envelope detecting circuit comprises:

- a peak detector (see fig. 3 inside waveform shaper (230) D2, R7 and C5, and the band pass filter (220)) for receiving the FM video signal and for detecting a peak value of the FM video signal (see col. 2 lines 47-53, col. 3 lines 27-34); and
- a level switch (see fig. 3 second amplifier (450) and comparator (300)) connected to an output of the peak detector for controlling the envelope level of the FM video signal according to mode information applied from a microprocessor so as to reduce a variation in the envelope level with a type of mode (manual or automatic) of operation of a video cassette recorder (VCR) (see col. 2 lines 41-66, and fig. 2 VR, the VR is OFF during an auto tracking).

Claim 5 further requires a video signal integrated circuit (IC) having the envelope detector. Official notice is given that it is well known in the art to integrate circuit. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jeong by using integrated circuit in order to reduce system complexity, cost and transmitter performance.

Regarding claim 6, Jeong discloses an amplifier (see fig. 3 first amplifier (210)) connected to an input terminal of the peak detector for amplifying the FM video signal with a predetermined gain prior to provision to the peak detector (see col. 3 lines 27-34).

Regarding claim 7, Jeong discloses an amplifier (see first amplifier (210) in fig. 3) connected to an input terminal of the peak detector (see fig. 3 inside waveform shaper (230) D2, R7 and C5) for amplifying the FM video signal with a predetermined gain after processing in the peak detector (see col. 3 lines 8-26).

Regarding claim 10, although Jeong does not disclose the mode information comprises SP/SLP mode information relating to operation of the VCR, Jeong discloses the switch SW1 selects automatic or manual tracking control (see col. 2 lines 58-62). Jeong further discloses the apparatus is effective tracking control for speed varying reproduction such as slow-motion reproduction (see col. 1 lines 13-17 and col. 1 lines 26-32). Jeong further teaches PAL type width (see col. 3 lines 17-21). Official notice is given that it is well known in the art that the operation of the VCR is related to the SP/SLP mode information. Therefore it would have been obvious to one of ordinary

skill in the art at the time the invention was made to modify Jeong by including SP/SLP mode of operation in order to control the VCR tracking.

Claim 11 is rejected for the same reason as described in claim 1 above.

Claim 12 is rejected for the same reason as described in claim 2 above.

Claim 14 is rejected for the same reason as described in claim 4 above.

Claim 15 is rejected for the same reason as described in claim 5 above.

Claim 16 is rejected for the same reason as described in claim 6 above.

Claim 17 is rejected for the same reason as described in claim 7 above.

Claim 20 is rejected for the same reason as described in claim 10 above.

4. Claim 1-3, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han (US Pat. No. 5,541,780).

Regarding claim 1, Han discloses a method of designing a video signal processing unit having an envelope detector (see fig. 7 envelope comparator, the arrow coming from the pre-amplifier to the microprocessor) for detecting an envelope of a frequency modulated (FM) video signal (col. 2 lines 26-37, col. 7 lines 47-56, the structure and operation of elements similar to those in fig. 2 are designated by the same reference to fig. 7. The signal coming from the head unit 10 in fig. 7 is frequency modulated and the video tape is a helical-scan), wherein a level variation switching circuit (see tape speed (30), microprocessor, and video out (80) in fig. 7) for changing an envelope level of the FM video signal according to an execution mode is incorporated into the video signal processing (col. 8 lines 1-14), and ON/OFF switching control (see fig. 7 switch controller (90) and video out (80)) of the level variation

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switching circuit is executed in response to a control data input from a microprocessor (see col. 8 lines 6-14 and see col. 9 lines 31-44 for LP mode).

Claim 1 differs from Han in that the claim further requires a video signal processing integrated circuit (IC) having the envelope detector. Official notice is given that it is well known in the art to integrate circuit. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Han by using integrated circuit in order to reduce system complexity, cost and transmitter performance.

Regarding claim 2, Han discloses the level variation switching circuit reduces variation in the envelope level of the FM video signal according to standard playback (SP) mode information and super long playback (SLP) mode information, respectively, contained in the control data input from the microprocessor (see col. 8 lines 1-14 and lines 46-67).

Regarding claim 3, Han discloses the level variation switching circuit operates in dependence on a playback mode of a video cassette recorder (see col. 8 lines 46-61, it is inherent that the switching circuit operates according to the playback mode).

Claim 11 is rejected for the same reason as described in claim 1 above.

Claim 12 is rejected for the same reason as described in claim 2 above.

Claim 13 is rejected for the same reason as described in claim 3 above.

Allowable Subject Matter

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5. Claims 8-9, and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 8 and 18, the prior arts fail to teach or suggest the method and apparatus claims 5 and 15 respectively, including level switch means includes a resistance element having a first terminal connected to said peak detector means and having a second terminal, said level switch means further including a switching control element connected to the second terminal of the resistance element, the switching control element being controlled by the mode information applied to said level switch means.

Regarding claims 9 and 19, these claims are objected to since they depend on claims 8 and 18.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIBRU, HELEN whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, NGOC Y. VU can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen Shibru
August 22 2005



NGOC-YEN VU
PRIMARY EXAMINER